



# Department of Defense DIRECTIVE

NUMBER 4715.11

August 17, 1999

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USD(A&T)

SUBJECT: Environmental and Explosives Safety Management on Department of  
Defense Active and Inactive Ranges Within the United States

References: (a) DoD Instruction 6055.14, "Unexploded Ordnance (UXO) Safety on  
Ranges," January 23, 1998 (hereby canceled)  
(b) DoD Directive 4715.1, "Environmental Security," February 24, 1996  
(c) [DoD Directive 6055.9](#), "DoD Explosives Safety Board (DESB) and  
Component Explosives Safety Responsibilities," July 1996  
(d) [DoD Directive 4715.12](#), "Environmental and Explosives Safety  
Management on Department of Defense Active and Inactive Ranges  
Outside the United States," August 17, 1999  
(e) through (k) see enclosure 1

## 1. PURPOSE

This Directive:

1.1. Cancels reference (a).

1.2. Establishes policy and assigns responsibilities under references (b) and (c)  
for:

1.2.1. Sustainable use and management of DoD's active and inactive ranges  
located within the United States.

1.2.2. The protection of DoD personnel and the public from explosives  
hazards on DoD's active and inactive ranges located within the United States.

## 2. APPLICABILITY

This Directive applies to:

2.1. The Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff; the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, as well as all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

2.2. All active and inactive ranges located within the United States that are owned, leased, or operated (range use and management is directed or controlled) by a DoD Component (hereafter referred to as "DoD ranges").

2.2.1. For DoD ranges that a non-DoD Component owns, this Directive applies subject to the terms of any agreement with the owner for the leasing or operation of the range. (DoD Components will attempt to ensure that future agreements are consistent with this Directive and provide for non-DoD users to proportionally reimburse the DoD Component for the costs of complying with this Directive.)

2.2.2. When a DoD Component other than the DoD Component exercising real property accountability operates a DoD range, responsibility for compliance with this Directive is assigned to the operating DoD Component, unless the two parties agree otherwise.

2.3. This Directive does not apply to DoD ranges located outside the United States. For such DoD ranges, consult DoD Directive 4715.12 (reference (d)).

2.4. This Directive does not apply to indoor ranges.

## 3. DEFINITIONS

The definitions of terms used in this Directive are in enclosure 2.

## 4. POLICY

It is DoD policy to:

4.1. Use and manage DoD ranges in a manner that supports national security

objectives and maintains the high state of operational readiness essential to the United States Armed Forces.

4.2. Ensure the long-term viability of DoD ranges while protecting human health and the environment.

4.3. Limit, to the extent practical, the potential for explosives mishaps and the damaging effects of such to personnel, operational capability, property, and the environment.

4.4. Resolve conflicts between explosives safety and other requirements with the objective of minimizing explosives hazards.

4.5. Design and use DoD ranges and the munitions used on them, to the extent practical, to minimize both potential explosives hazards and harmful environmental impacts and to promote resource recovery and recycling

## 5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Personnel and Readiness must provide guidance to ensure DoD training ranges meet the operational requirements necessary to support national security objectives and maintain the high state of operational readiness essential to the United States Armed Forces.

5.2. The Under Secretary of Defense (Comptroller) must provide financial management policy regarding active and inactive range management activities in accordance with reference (e).

5.3. The Under Secretary of Defense for Acquisition and Technology must:

5.3.1. Take overall OSD responsibility for safety, explosives safety, environmental, and technology policies related to implementation of this Directive.

5.3.2. Develop acquisition plans, strategies, guidance, and assessments to implement this Directive.

5.3.3. Ensure that research, development, test, and evaluation (RDT&E) programs address technology requirements to enhance sustainable range management.

5.3.4. Have OSD staff responsibility for all safety, explosives safety (through the Chair, Department of Defense Explosives Safety Board CDDESB)), and environmental policy and oversight related to implementation of this Directive.

5.3.5. Be the OSD proponent for technology requirements for unexploded ordnance (UXO) clearance on DoD ranges and coordinate such requirements with the Director, Test, Systems Engineering and Evaluation.

5.3.6. Designate a DoD Component as Executive Agent responsible for:

5.3.6.1. The coordination of Joint Service technology requirements for UXO clearance on DoD ranges. (The Executive Agent will coordinate UXO clearance technology requirements affecting the EOD mission area with the Executive Manager for EOD Technology and Training.)

5.3.6.2. The transition of these requirements into technology programs.

5.3.7. Coordinate DoD Component efforts to assess the environmental impacts of munitions use on DoD ranges.

5.3.8. Provide guidance to all DoD Components on establishing and maintaining complete inventories of DoD ranges.

5.4. The Head of each DoD Component must:

5.4.1. Establish the necessary procedures to ensure that its DoD ranges comply with this Directive and include sustainable range management goals in long-term planning efforts.

5.4.2. Establish and maintain an inventory of its DoD ranges consistent with the guidance provided by the Deputy Under Secretary of Defense for Installations.

5.4.3. Establish and implement procedures to assess the environmental impacts of munitions use on DoD ranges.

5.4.4. Ensure that management plans, at the installation or responsible activity level, include planning for sustainable range use by December 31, 2001, and are reviewed or updated at least every 5 years. This planning, at a minimum, will address: long-term sustainable use; management procedures; record keeping; standards; monitoring; public outreach and public participation programs, if required;

technology requirements to ensure sustainable range management; integration with other installation planning processes; and resources.

5.4.5. Establish procedures for range clearance operations to permit the sustainable safe use of DoD ranges for their intended purpose. To determine the frequency and degree of range clearance operations consider, at a minimum, the safety hazards of clearance, each range's intended use, and the quantities and types of munitions expended on that range.

5.5. DoD Components must:

5.5.1. Restrict access to DoD ranges, especially impact areas and other areas suspected of containing UXO.

5.5.1.1. Take appropriate action to prevent unauthorized access to DoD ranges. Such actions include establishing access controls (e.g., posting UXO hazard warning signs, fencing the area, establishing roving security patrols) and providing public notifications of potential explosives hazards.

5.5.1.2. Provide appropriate explosives safety training to individuals authorized access to DoD ranges before they enter the range. DoD Components will develop guidelines to determine when individuals authorized access to DoD ranges will be escorted.

5.5.2. Provide appropriate information to local officials regarding the compatible uses of non-DoD property located near DoD ranges.

5.5.3. For DoD ranges, maintain permanent records of:

5.5.3.1. All military munitions expended, to include an estimated dud rate, by type, quantity, location, and using organization.

5.5.3.2. All UXO clearance operations or explosives ordnance disposal (EOD) incidents conducted on the range.

5.5.3.3. The coordinates of all areas known or suspected of containing UXO. (Installation master plans or range maps will be used to document such areas.)

5.5.4. Minimize the use on DoD ranges, to include for RDT&E, of munitions that contain submunitions or depleted uranium (DU) to that required to support national security objectives.

5.5.4.1. For submunitions, restrict such use to specifically designated target or impact areas.

5.5.4.2. For DU, restrict such use to specifically designated Nuclear Regulatory Commission-licensed target or impact areas. When possible, DU will be fired into containment fixtures, and high-explosive munitions will not be fired into the same area as DU.

5.5.4.3. When practical, establish sole use target or impact areas to segregate such munitions from other munitions.

5.5.5. To the extent practical, use targets on DoD ranges that do not contain hazardous materials (e.g., petroleum, oils, lubricants, radium dials, and batteries).

5.5.6. Conduct a hazard assessment before any range clearance operation at DoD ranges. This assessment will include, at a minimum, rationale for the clearance, the number of personnel involved, support requirements, the types of ordnance anticipated to be encountered, and expected UXO contamination levels. When range clearance is an integral part of a test or training plan, a hazard assessment will be included.

5.5.7. Establish safe and practical methods for recycling or disposing of range residues in accordance with DoD Manual 4160.21-M (reference (f)). Ensure range residues, to include cartridge cases, ordnance-derived wastes, and targets, do not contain ammunition, explosives or other dangerous articles prior to public release from DoD control.

5.5.8. Prohibit controlled burning of vegetation as a method of UXO clearance on DoD ranges. Controlled burns may be used to control dense brush or undergrowth or clear a range area of vegetation to make UXO clearance operations safe for personnel conducting the clearance.

5.5.9. Ensure procedures are in place to:

5.5.9.1. Notify installation personnel and the public, as appropriate, of range operations that may present an explosives hazard off the DoD range.

5.5.9.2. Respond promptly to protect personnel and property from such hazards, both on and off the installation.

5.5.10. Participate, as appropriate, in established national public-involvement programs, to include dialogues with interested members of the public, to discuss and explain the explosives hazards associated with DoD ranges.

5.5.11. Ensure range issues that affect or have the potential to affect the surrounding communities (e.g., controlled burns, access controls, institutional controls) are addressed in appropriate local public participation forums.

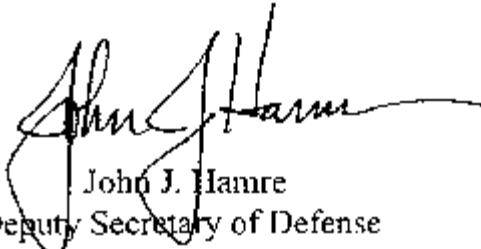
5.5.12. Establish a program to educate DoD personnel, their dependents, and private citizens living near DoD ranges on the explosives hazards associated with unexploded ordnance and trespassing on DoD ranges.

5.5.13. Before changing the use of a range area, conduct appropriate range clearance operations consistent with the proposed use of the area.

5.5.14. Respond, in accordance with DoD's explosives safety authority (10 U.S.C. 172 (reference (g)) as implemented in DoD Directive 6055.9 (reference (c)), and DoD 6055.9-STD (reference (h)) and response authorities (10 U.S.C. 2701 (reference (i))); 42 U.S.C. 9604 (reference (j)); and E.O. 12580, Sec. 2(d) (reference (k))) to a release or substantial threat of a release of munitions constituents from an active or inactive range to off-range areas, when such release poses an imminent and substantial threat to human health or the environment.

6. EFFECTIVE DATE

This Directive is effective immediately.



John J. Hamre  
Deputy Secretary of Defense

Enclosures - 2

E1. References, continued

E2. Definitions



E1. ENCLOSURE 1

REFERENCES, continued

- (e) [DoD Instruction 7000.14](#), "DoD Financial Management Policies and Procedures," November 15, 1992
- (f) DoD Manual 4160.21-M, "Defense Reutilization and Marketing Manual," August 18, 1997, authorized by DoD [Directive 4140.1](#), "Material Management Policy", January 4, 1993
- (g) Section 172 of title 10, United States Code
- (h) [DoD 6055.9-STD](#), "DoD Ammunition and Explosives Safety Standards," July 1999, authorized by DoD Directive 6055.9, "DoD Explosives Safety Board (DESB) and DoD Component Explosives Safety Responsibilities," July 29, 1996
- (i) Section 2701 of title 10, United States Code
- (j) Section 9604 of title 42, United States Code
- (k) Executive Order 12580, "Superfund Implementation," January 23, 1987, as amended

## E2. ENCLOSURE 2

### DEFINITIONS

E2.1.1. Active Range. A range that is currently in service and is being regularly used for range activities.

E2.1.2. Explosives Mishap. An accident or unexpected event involving DoD ammunition and explosives.

E2.1.3. Explosives Safety. A condition where operational capability and readiness, personnel, property, and the environment are protected from the unacceptable effects of an ammunition or explosives mishap.

E2.1.4. Impact Area. The identified area within a range intended to capture or contain ammunition, munitions, or explosives and resulting debris, fragments, and components from various weapon system employments.

E2.1.5. Inactive Range. A range that is not currently being used, but that is still under military control and is considered by the military to be a potential range area, and that has not been put to a new use incompatible with range activities.

E2.1.6. Military Munitions. All ammunition products and components produced or used by or for DoD or the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the U.S. Department of Energy (DOE), and National Guard personnel. The term:

E2.6.1.1. Includes: Confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD Components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and any components of such.

E2.1.6.2. Does not include: Wholly inert items, improvised explosive devices, and nuclear weapons, devices, and components of such. (However, it does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.)

E2.1.7. Range. A designated land or water area set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas. The definition of a range does not include airspace, or water, or land areas underlying airspace used for training, testing, or research and development where military munitions have not been used.

E2.1.8. Submunition. Any munition that, to perform its task, separates from a parent munition.

E2.1.9. Sustainable Range Management. Management of a DoD range in a manner that:

E2.1.9.1. Supports national security objectives and maintains the operational readiness of the Armed Forces; and

E2.1.9.2. Ensures the long-term viability of DoD ranges while protecting human health and the environment.

E2.1.10. Unexploded Ordnance (UXO). Military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

E2.1.11. United States. The States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Marianas Islands, American Samoa, Guam, Johnston Atoll, Kingman Reef, Midway Island, Nassau Island, Palmyra Island, the United States Virgin Islands, Wake Island, and any other territory or possession over which the United States has jurisdiction, and associated navigable waters, contiguous zones, and ocean waters of which the natural resources are under the exclusive management authority of the United States.